# **GBS** Disease Program Overview

# Clinical Features

In neonates two syndromes exist: early-onset (<7 days old) and late-onset (7-90 days old). Both include: sepsis, pneumonia and meningitis. In adults: sepsis and soft tissue infections. Pregnancy-related infections: sepsis, amnionitis, urinary tract infection, and stillbirth.

## **Etiologic Agent**

A bacterium - *Streptococcus agalactiae* or group B streptococcus (group B strep).

#### Incidence

Approximately 19,000 cases occur annually in the United States; approximately 7,600 occurred in newborns before recent prevention. The rate of early-onset infection has decreased from 1.7 cases per 1,000 live births (1993) to 0.5 cases per 1,000 live births (2000). Since active prevention began in the mid 1990s, the rate of group B strep disease among newborns in the first week of life has declined by 70%. The racial gap between blacks and whites narrowed by 75% in 1998. Since 1998, the incidence of early-onset disease has begun to plateau. The racial gap in incidence also increased slightly, and in 2001 represents a 46% decline from that in 1993.

#### Sequelae

Neurologic sequelae include sight or hearing loss and cerebral palsy. Death occurs in 5% of infants and 16% of adults.

### Costs

Direct medical costs of neonatal disease before prevention were \$294 million annually.

#### **Transmission**

Asymptomatic carriage in gastrointestinal and genital tracts is common. Intrapartum transmission via ascending spread from vagina occurs. Mode of transmission of disease in nonpregnant adults is unknown.

## **Risk Groups**

Adults with chronic illnesses (e.g., diabetes mellitus and liver failure), pregnant women, the fetus, and the newborn are at risk. For neonatal disease, risk is higher among infants born to women with group B strep colonization, prolonged rupture of membranes or preterm delivery. Rates are substantially higher among blacks and the elderly.

## **Surveillance**

Active surveillance for invasive group B strep disease is ongoing in a multistate population of approximately 26 million, including approximately 400,000 live births annually. The disease is not reportable in most states.

## **Trends**

This pathogen emerged in the 1970s as the most common cause of sepsis in newborns. Adult disease was recognized more recently.

intrapartum prophylaxis has occurred.

## **Challenges**

To implement universal screening in all prenatal health care settings by promoting use of the 2002 revised CDC guidelines for prevention of group B strep. To monitor potential adverse consequences of increased use of antibiotics.

## **Activities**

Interface with national organizations, health departments and community groups to create awareness and promote a universal screening policy in all prenatal care settings. Continued active surveillance by the Active Bacterial Core Surveillance (ABCs) – <a href="https://www.cdc.gov/abcs">www.cdc.gov/abcs</a> - to monitor rates of group B strep in 10 states in the country; this data can be used for continued research and to evaluate the effect of the newest guidelines.